



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,461	08/07/2000	Akinori Sudo	Q59895	2864

7590 11/08/2002

Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue N W
Washington, DC 20037-3213

EXAMINER

HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

634461

Applicant(s)

SAJ

Examiner

Wendickson

Group Art Unit

1759

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 8/26/02
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-14 is/are pending in the application.
- Of the above claim(s) 11 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10, 12-14 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☒ Claim(s) 1-14 are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 1754

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) In claim 5, 'thin' is subjective and unclear. Please compare marked-up and clean versions.

B) In claim 1, 'carbon-made' is unclear as to its composition, particularly since the previous phraseology was clear and direct.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 and 12-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The 'carbon-made' limitation is not supported, in so far as it differs from the language previously used.

Claims 1, 9, 10, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ota et al. Ota teaches in column 1 and fig. 6 an Acheson furnace method for making graphite, from carbon powder in a carbon casing by resistance heating. The graphite made is deemed to have the claimed characteristics since it was made in the claimed manner. The present priority has not been 'perfected'. The furnace has a direct supply of electricity (it is noted that the claims do not recite direct electric heating). The container has resistance and conductivity values since it is a solid- the claim does not require any particular values.

Art Unit: 1754

Claims 2-8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota taken with Antoni et al. and Ozaki et al. and Vohler.

Ota, supra, does not teach the details of the apparatus, however the examiner takes Official Notice that these are standard features of the Acheson furnace, furthermore discussed by Antoni columns 3 and 6. It is noted that Ota teaches a configuration of cells which is rotated from the claimed orientation; placed next to each other and not stacked. However the orientation of an apparatus does not impart patentability; In re Dailey et al. 149 USPQ 47. Using the claimed water cooling, carbon filler and stacking is an obvious expedient to make graphite. Claim 14 is suggested by Antoni column 1, although it is old and known to use graphite as a conductive filler in electrodes. Ozaki teaches in column 5 inert atmosphere and the temperature of claims 7 and 8. Ota teaches packing coke of claim 6 (feature 22). Antoni fig. 7 teaches plural compartments put together. Antoni col. 7 lines 35-45 teach the graphite pieces of claim 5 and water cooling in col. 6 lines 40-45. Vohler teaches electrodes at the ends of the furnace.

Applicant's arguments filed 8/26/02 have been fully considered but they are not persuasive.

The argument that the heating is direct is not persuasive, as the claims only recite that the *electricity* is direct. The argument of lack of packing is unpersuasive, in view of claim 6 which recites it and the other claims being open to its inclusion. The newly added language of resistance does not recite any particular values. The recitation of column 3 and 6 refers to the entirety of these columns. Stacking versus end-to-end is deemed obvious due to the case law cited. The argument on g. 7 that the present container is 'made of carbon' is an indication that the previous claim language was appropriate and should be restored. The metallic cage of Antoni does have a small electrical resistance- it is not a true superconductor. The claims do not recite any values and only exclude a true superconductor (zero resistivity). Ota is deemed to have the claimed interlayer distance due to also making a graphite material.

Art Unit: 1754

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.



Stuart Hendrickson
examiner Art Unit 1754